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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,016	01/03/2002	R. Lawrence Ives	3522	6609

7590 09/12/2003

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EXAMINER

A, MINH D

ART UNIT PAPER NUMBER

2821

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

10/038,016

Applicant(s)

IVES, R. LAWRENCE

Examiner

Minh D A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2 Claims 1, 6-11, 13 –11, 13-16 are rejected under 35 U.S.C. 102(b) as being unpatentable by Adler et al.(US 6,060,832).

Regarding claims 1, 6-11 and 13-16, Adler discloses the electron beam collector (180 or 106) comprising: an electrically conductive dissipation cavity; a front wall located at one side of the dissipation cavity having an aperture (190) to allow the passage of the electron beam into the cavity; a conductive reflector electrically and mechanically attached to the interior cavity in the enclosure, opposite the aperture, positioned relative to the electron beam to reflect electrons and secondary electrons, into the dissipation cavity and a voltage source (V2 or V4 or V5) electrically connected the collector. See figures 3, 8A and 8B, col.9, line 38-67 to col.12, lines 1-37.

3. Claims 2-5, 12 and 17 are rejected under 35 U.S.C. 102(b) as being unpatentable by Schult.(US 6,429,589).

Regarding claims 2-5, 12 and 17, Schutt discloses the depressed collector (40) for use with a device emitting an electron beam containing electrons traversing into the collector where energy is recovered from the electron beam, the collector (40)

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comprising: means for depressing the voltage of the collector (40); and means for trapping the electrons after they exit the electron beam device. See figures 1-5, col.1, lines 14-67 and col.2, lines 1-15.

4. Claims 2-5, 12 and 17 are rejected under 35 U.S.C. 102(b) as being unpatentable by Cardwell et al. (US 6,111,358).

Regarding claims 2-5, 12 and 17, Cardwell discloses the depressed collector (100) for use with a device emitting an electron beam containing electrons traversing into the collector where energy is recovered from the electron beam, the collector (100) comprising: means for depressing the voltage of the collector (100); and means for trapping the electrons after they exit the electron beam device. See figure 4, col.7, lines 19-67 and col.8, lines 1-57.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Schult.(US 6,429,589) or Cardwell et al. (US 6,111,358).

Regarding claims 18-19, Schult or Cardwell discloses the claimed invention except for the rear wall is planar or the electron beam is a sheet electron or the electron beam is a large aspect ratio annular electron beam. It would have been an obvious

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matter of design choice to have planar or sheet electron or the large aspect ration annular electron beam, since applicant has not disclosed that the planar or the sheet electron or the large aspect ration annular electron beam solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with the planar or sheet electron or the large aspect ration annular electron beam.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Symons . (US 5,650,751); Rawls, Jr. (US 3,824,425 and Doyle (US 3,717,787) are cited to show the depressed electron beam collector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Minh A whose telephone number is (703) 605-4247. The examiner can normally be reached on M-F (7:30 –4:30 PM).

If attempts to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Don Wong, can be reached on (703) 308-4856. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and (703) 872-9319 for final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

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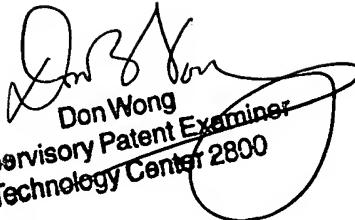
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Examiner

Minh A

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09/01/03


Don Wong
Supervisory Patent Examiner
Technology Center 2800